REMARKS

Claims 1-20 are in the case. Claims 1-4, 10, and 15 are rejected under 35 USC § 102 over USPN 6,985,831 to Ito et al. Claims 5-9, 11-15, and 16-20 are rejected under 35 USC § 103 over Ito et al. The rejections are respectfully traversed. Reconsideration and allowance of the claims are respectfully requested.

PRELIMINARY COMMENTS ON CLAIM REJECTIONS

It is noted that Ito et al. use many of the same words as those used in the present application and claims. Some of those words (certainly not all) might even refer to similar elements. However, it is noted that applicants are not claiming these elements individually, nor do applicants claim to have invented these individual elements. What applicants have done is to assemble system components into a novel combination, with the various elements interacting in novel ways. Thus, while Ito et al. may well use some of the same words, and might even use some of the same elements, merely coming up with a laundry list of such similar words does not make the present invention obvious, as described in more detail below.

CLAIM REJECTIONS UNDER §102

Independent claim 1 claims, *inter alia*, a data collection system with a data input form adapted to receive data, a message queue for receiving the data from the data input form, and temporarily managing the data until the data collection system can process the data, a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data, a transaction manager for receiving the data from the message queue and processing the data, a data logger, for logging the processing transactions of the transaction manager, a data loader for receiving the data from the transaction manager and preparing the data for storage, and a data storage device, for receiving the data from the data loader.

Thus, claim 1 recites seven specific elements of the invention in combination. Ito et al. do not describe these seven elements in combination. First, Ito et al. fail to describe a data input *form*. Instead, Ito et al. describe a data collection layer 710 that is principally

responsible for accepting connections from the field instrument unit Fl 2 (column 24 lines 8-9). Column 24 goes on to explain more about the data collection layer 710. However, nowhere is the data collection layer 710 described as being a *form* adapted to receive data. There are many different types of data entry. Claim 1 claims a form, and Ito et al. claim the data collection layer 710 that accepts connections. A form and something that accepts connections from field instruments are two different things. Thus, Ito et al. do not describe a data input form adapted to receive data. This is the first patentable difference between claim 1 and Ito et al., and this difference alone is sufficient to find patentability of claim 1 over Ito et al.

Second, Ito et al. fail to describe a message queue for temporarily managing the data, in combination with a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data. Instead, Ito et al. describe files 730, 731, that include log files, temporary data files, and other files used by the system 702. The files 730, 731 are used to provide more information about the system 702 when problems occur and to provide temporary storage for data before the data is saved to the database 558 (column 23 lines 60-67). Ito et al. also describe incoming data message queues 720 that receive data from the data collection layer 710. However, Ito et al. never describe that the files 730, 731 temporarily store the data received by the message queues 720 while waiting for the system to process the data. In fact, the files 730, 731 are not even in communication with the message queues 720, as depicted in figure 14. This is very different from the connections between the temporary data storage 32 and the message queue 34 as depicted in figure 1 of the present application, as described in claim 1. The message queues 720 of Ito et al. operate as storage space, and do not operate to temporarily manage data, in the manner as presently claimed. Thus, Ito et al. do not describe the message queue and temporary data storage that function and interact in the same manner as claimed in claim 1. This is the second patentable difference between claim 1 and Ito et al., and this difference alone is sufficient to find patentability of claim 1 over Ito et al.

Third, Ito et al. fail to describe that the transaction manager receives data from the message queue and processes the data, as claimed in claim 1 and depicted in figure 1 of the present application. Instead, Ito et al. describe that the data processing layer 714

receives data from the files 731, the prioritized data message queues 702, and the database 558. However, Ito et al. do not describe that the data processing layer 714 receives data from the message queue 720. By contrast, claim 1 claims that the transaction manager receives data from the message queue. Thus, the relationship between the components described in claim 1 is different from that as described by Ito et al. This is the third patentable difference between claim 1 and Ito et al., and this difference alone is sufficient to find patentability of claim 1 over Ito et al.

Thus, there are at least three substantial differences between claim 1 as recited and Ito et al., any one of which is sufficient to find patentability of claim 1. Therefore, claim 1 patentably defines over Ito et al. Reconsideration and allowance of claim 1 are respectfully requested. Dependent claims 2-4 depend from independent claim 1, and contain additional important aspects of the invention. Therefore, dependent claims 2-4 patentably define over Ito et al. Reconsideration and allowance of dependent claims 2-4 are respectfully requested.

Similar to that as described above in regard to claim 1, independent claim 10 claims, *inter alia*, a data collection system with a presentation layer including a data input form adapted to receive data, and an output form for presenting statistically manipulated historical trends of the data, a business logic layer including a message queue for receiving the data from the data input form and temporarily managing the data until the data collection system can process the data, a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data, a transaction manager for receiving the data from the message queue and processing the data, a data logger, for logging the processing transactions of the transaction manager, and a data loader for receiving the data from the transaction manager and preparing the data for storage, and a data service layer including a data storage device, for receiving the data from the data loader.

Thus, claim 10 recites all of the elements from the discussion above, wherein three patentable differences were identified between the invention as claimed and Ito et al. Further, claim 10 recites additional important aspects, such as the layer structure for the system, and the relationship of the various elements as to which layer they reside

upon. Ito et al. does not describe any of these relationships as claimed. Thus, there is identified another patentable difference between claim 10 and Ito et al.

Thus, there are at least four substantial differences between claim 10 as recited and Ito et al., any one of which is sufficient to find patentability of claim 10. Therefore, claim 10 patentably defines over Ito et al. Reconsideration and allowance of claim 10 are respectfully requested.

Similar to that as described above in regard to claims 1 and 10, independent claim 15 claims, *inter alia*, a data collection system having a data input form adapted to receive data, a message queue for receiving the data from the data input form and temporarily managing the data until the data collection system can process the data, a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data, a transaction manager for receiving the data from the message queue and processing the data, a data logger for logging the processing transactions of the transaction manager, a data loader for receiving the data from the transaction manager and preparing the data for storage, a data storage device for receiving the data from the data loader, a statistical process control engine for receiving the data from at least one of the transaction manager and the data storage device and statistically manipulating the data, a state simulation engine for gathering and providing state data between the data collection system and a statistical process control engine, and an output form for presenting statistically manipulated historical trends of the data.

Thus, claim 15 also recites all of the elements from the discussion above, wherein three patentable differences were identified between the invention as claimed and Ito et al. Further, claim 15 recites additional important aspects, such as the state simulation engine. Ito et al. does not describe anything like a state simulation engine, which coordinates communication between different programs in the manner as claimed and depicted in figure 3 of the present application. The examiner references the background section of Ito et al. for support of Ito et al.'s teaching of a state engine. However, the referenced portion, column 1 lines 65-68, says nothing about such a state engine (it is noted that column 1 only has 67 lines). Further, no other section of Ito et al. says anything about a state engine. Thus, there is identified another patentable difference between claim 15 and Ito et al.

Thus, there are at least four substantial differences between claim 15 as recited and Ito et al., any one of which is sufficient to find patentability of claim 15. Therefore, claim 15 patentably defines over Ito et al. Reconsideration and allowance of claim 15 are respectfully requested.

CLAIM REJECTIONS UNDER §103

In the office action, the examiner has cited Ito et al. as the primary 103 reference, and has then cited different portions of Ito et al. as the secondary 103 reference. This is an unusual construct, as such a rejection would typically be asserted as a 102 rejection. Regardless, there are a minimum of three patentable differences between each of the independent claims 1, 10, and 15 and Ito et al., as described above. Combining different portions of Ito et al. in the manner as described in the office action does not overcome these patentable differences. Therefore, each of the independent claims 1, 10, and 15 remain patentable over Ito et al. The dependent claims recite additional important elements of the invention in combination with the patentable combination of elements of the independent claims. Therefore, the dependent claims also patentably define over Ito et al. Reconsideration and allowance of claims 1-20 are respectfully requested.

CONCLUSION

Applicants assert that the claims of the present application patentably define over the prior art made of record and not relied upon for the same reasons as given above. Applicants respectfully submit that a full and complete response to the office action is provided herein, and that the application is now fully in condition for allowance. Action in accordance therewith is respectfully requested.

In the event this response is not timely filed, applicants hereby petition for the appropriate extension of time. If other fees are required by this amendment, such fees may be charged to deposit account 12-2252.

Sincerely,

LUEDEKA, NEELY & GRAHAM, P.C.

By:

     Rick Barnes, 39,596

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